

Informal document GRE-74-19 (74th GRE, 20-23 October 2015, agenda item 10)

Lamps switch-off in refineries

Presentation for GRE 74





Conflict between R48 requirements and refineries rules

- A conflict has been identified between lighting rules applying for vehicle certification (UN R48) and rules applying for circulation inside refineries
- UN R48 requirements (05 and 06 series)
 - Automatic switching of headlamps in low ambient light conditions
 - Alternative using DRL + rear position lamps
 - No complete lamp switch-off possible above 10 km/h

Refineries

- All lamps shall be OFF during circulation inside the site
- Some refineries allow front DRL only
- In all cases, it is forbidden to have lamps activated at the side and to the rear (under dangerous goods zone)
- Reasons: eliminate risk of sparks (due to failing light source)



Conflict between R48 requirements and refineries rules







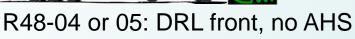
R48-03: no DRL, no AHS







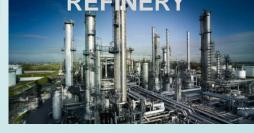












R48-05: DRL front + position lamps, no AHS









R48-05 or 06: DRL front, with AHS

Short term solution and future issues

Current solutions possible:

- Use R48-04 or R48-05 with alternative to AHS specified in paragraph 6.2.7.6.3.
- Use possibility to switch off DRL up to 10 km/h
- Not fit AHS on vehicles operating in refineries

Future situation

- As there will be no more allowed de-activation of AHS, we will not be able to guarantee that DRL alone can stay during the whole driving cycle in the refinery (if the ambient light decrease, AHS will activate automatically the dipped-beam with §5.11 lamps).
- We see no more acceptable solution for refineries when AHS is applied on mandatory basis.